## North Cascades Resource Brief

National Park Service U.S. Department of the Interior

North Cascades National Park Complex





TOP RIGHT: Grizzly captured on remote camera. Photo courtesy of the British Columbia Ministry of the Environment

ABOVE: Silhouette of a bear determined to be a Class I ("confirmed") grizzly on Sahale Arm in North Cascades National Park. Photo courtesy of Joe Sebille

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### **Grizzly Bears**



"The grizzly bear has come to represent a vital dimension of ...wildlands. Its presence is a kind of assurance that we still have large wilderness areas.... Conversely, its absence clearly indicates that we are failing to maintain parts of this planet in a wild state..." (Hummel and Pettigrew 1991).

#### **Importance**

Grizzly bears are highly adaptable ecosystem generalists, opportunistic omnivores found in habitats ranging from subalpine meadows to prairielands; from rich, salmon-bearing stream systems around the north Pacific Rim to the wind-swept scrub of the Gobi Desert. There is very little information about their habitat use in the North Cascades, but we would expect grizzly bears here to feed on more than 100 species of herbaceous plants, insects, carrion, small mammals and where available, spawning fish.

It is their species' ability to survive highly variable conditions, their general avoidance of humans, and the legend of their fearlessness that have lent grizzly bears their image of ultimate wildness. In a sense grizzly bears so capture the human imagination because of their similarities to us. People too are highly adaptable generalists at the top of the food chain. It is the collision of our species – our own trying to tame the ultimate wild – that has led to the extirpation of grizzly bears throughout approximately 98% of their former range in the contiguous states.

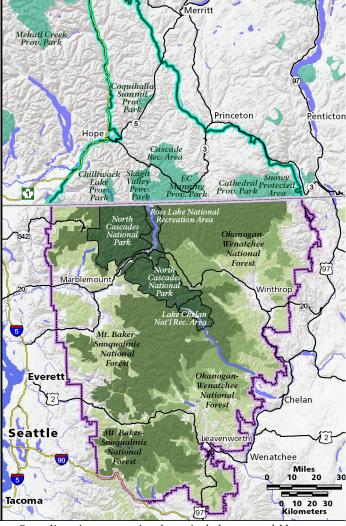
#### **Status and Trends**

The North Cascades ecosystem is roughly the area contained between Washington's Interstate 90 and Merritt, British Columbia; and in the US, federal land ownership east and west of the crest (see map). Defining a grizzly bear population in a more confined space, such as a national park, is not viable: their ranges are much too large.

It is not known how many grizzly bears remain in the North Cascades (see map). Credible observations are extremely rare. In 2007 an interagency team estimated the international population to be fewer than 35. This estimate was based primarily on reviews of observation reports from both countries over the past 30 years. In 2010 a grizzly bear was photographed by remote camera in Manning Provincial Park, less than 20 miles north of North Cascades National Park Complex (see photo above) and a series of photographs taken that year of a bear farther south within NOCA was determined in 2011 by an interagency team of biologists to be a "Class I" (confirmed) observation of a grizzly bear (see photo at left). Other credible observations within the US portion of the ecosystem were made in 1996, 1991, and 1989. An ad-

# North Cascades Grizzly Bear Recovery Areas: "North Cascades Ecosystem" (USA) "North Cascades Grizzly Bear Population Unit" (Canada) North Cascades Ecosystem North Cascades Grizzly Bear Population Unit North Cascades NPS Complex / Stephen Mather Wilderness National Forests USFS Wilderness areas USFS Inventoried Roadless Areas British Columbia provincial parks





ditional observation during 1998 was just across the border, in British Columbia. In 1999 DNA samples confirmed a female grizzly in Manning Park, BC in the Skagit watershed. An unknown portion of observations within BC during the past 15 years is likely made up of "dualcitizen" bears whose homeranges span the international boundary. A perception that grizzly bears remain only in Canada is not easily tested: most protected areas in the North Cascades are in the US and in larger, more rugged and remote blocks of land. The relative abundance of roads in British Columbia's Cascades may facilitate observations of grizzly bears.

In 2012, an interagency effort to "capture" grizzly bear DNA on barbed wire hair-snags will be continue in portions of the North Cascades ecosystem, including North Cascades National Park. This project has been in collaboration with the Cascades Carnivore Connectivity Project to maximize the number and distribution of sampling sites targeting both

black and grizzly bears. Sampling sites are were chosen based on their suitability as grizzly bear habitat and for isolation from human activity. No grizzly bears were detected during the 2010-2011 surveys.

Stein Valley Prov. Park

#### Discussion

Biological consensus is that the number of grizzly bears remaining in the North Cascades ecosystem is too small to recover without intervention. The nearest grizzly bear populations are found in the Stein and Nahatlatch Valleys northwest of the Cascade Range, and in the Selkirk Mountains of Washington, Idaho and British Columbia. Grizzly bears do not typically disperse over long distances, and as these populations are also critically low there is no short-term possibility of range expansion into the Cascades from them.

Population augmentation has had positive results in Montana's Cabinet Mountains. This precedence would provide useful information for evaluating alternatives for the North Cascades. The process is not

simple: grizzly bears could be translocated only from populations which could sustain the loss of individuals. They would need to come from habitat as similar as possible to the target area in order to facilitate their survival in a new ecosystem. Bears would need to be chosen by age and gender groups least likely to attempt to return to their original homerange, and placed in an area where they would likely find a resident bear with whom to breed. Positive DNA results from the on-going survey could inform decisions by indicating the nearest relatives of resident bears - both genetically and geographically. They would also indicate where a resident bear could be found.

The first step toward augmenting grizzly bear populations in the North Cascades would be a public review process and environmental impact statement. Funds for this three-year effort have not been appropriated.